

Reasons for Allowance

Claims 1-2, 5-6, 9, 11, 25 and 27-28 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Prior art fails to teach a production method for a solar battery module comprising: utilizing apparatus including a press belt overlapping at least a portion of the positioning belt, the positioning belt having a vacuum suction hole and the heating belt having no suction hole; transferring the solar battery cells and the interconnectors transported to the downstream portion of the positioning belt onto the heating belt while holding the solar battery cells and the interconnectors between the positioning belt and the press belt; and holding the solar battery cells and the interconnectors transferred onto the heating belt between the heating belt and the press belt and soldering the interconnectors to the solar battery cells while moving the solar battery cells and the interconnectors along with the heating belt.

Shimotomai (US 6367530) discloses the recited apparatus structure, but fails to teach holding the solar battery cells and the interconnectors between the heating belt and the press belt and soldering the interconnectors to the solar battery cells while moving the solar battery cells and the interconnectors along with the heating belt. Shimotomai teaches that the solar module is never moved while being laminated and thus, unlike present claim, laminating (type of bonding- like soldering) and moving the product cannot occur simultaneously. Tonari (JP-2000-022188) discloses soldering the interconnectors to the solar battery cells while moving the solar battery cells and the interconnectors along with the heating belt. However, Tonari teaches away from recited

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method since Tonari requires heating belt having suction holes to absorb the solar cells for transporting. Considering disclosures of Shimotomai and Tonari as a whole, a person of ordinary skill in the art would not combine Shimotomai with soldering step of Tonari because the solar cells and interconnectors in Shimotomai have already been connected (soldered) before being laminated. At the time of the invention, no motivation was found for one of ordinary skill in the art to modify solar module production processes in prior art so as to arrive at the claimed method.

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEVANG PATEL whose telephone number is (571)270-3636. The examiner can normally be reached on Monday thru Thursday, 8:00 am to 5:30 pm, EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jessica Ward can be reached on 571-272-1223. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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